

## **ABSTRACT**

A Hall element is provided with a segmented field plate. Dynamic bias control is applied to the segments of the field plate. In one embodiment, a feedback signal is derived from an amplified output of the Hall element. The feedback signal is applied to the segments of the field plate in order to control sheet conductivity in specific localized areas. In one embodiment, a metal field plate is split into four segments along lines between bias and sense contacts of the Hall element. Opposing diagonal segments are electrically connected.